

ABSTRACT

ULTRASOUND CONTRAST MEDIA, CONTRAST AGENTS
CONTAINING THE MEDIA AND METHOD

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10 The invention relates to injectable media for ultrasonic echography in
the form of microbubbles or microballoons comprising at least two
biocompatible substances A and B (gaseous at the body temperature) forming
a mixture which when in suspension with usual surfactants, additives and
stabilisers provides useful ultrasound contrast agents. At least one of the
15 components (B) in the mixture is a gas whose molecular weight is greater
than 80 daltons and whose solubility in water is below 0.0283ml per ml of
water at standard conditions. The presence of the first component (B) in the
contrast medium may vary between 0.5 and 41 volume percent. The other
20 component (A) of the ultrasound contrast media is a gas or a mixture of gases
whose molecular weight is below 80 daltons. The second component is
present in a proportion of between 59 - 99.5% by vol., and is preferably chosen
from oxygen, air, nitrogen, carbon dioxide or mixtures thereof. Gas mixtures
described are found to be very effective as ultrasound contrast media. The
invention also comprises a method of making the ultrasound contrast
medium, the contrast agent and the ultrasound agent kit.